

What is claimed is:

1. A dry toner comprising a base toner-particle, fine particles of a charge control agent on the surface of the base toner-particle, and an external additive on the surface thereof,

the base toner-particle comprising a toner core and organic fine particles on the surface of the toner core,

the toner core comprising a toner binder, a colorant and wax,

wherein the wax is concentrated in the vicinity of the surface of the toner core.

2. A dry toner according to Claim 1, wherein the vicinity of the surface of the toner core is a region on an arbitrary cross section of the toner core, having a center of the toner core thereon, where the region lies between an outer circumference of the arbitrary cross section and an inner circumference having a radius two thirds of a radius of the outer circumference.

3. A dry toner according to Claim 1, wherein the vicinity of the surface of the toner core is a region on an arbitrary cross section of the toner core, having a center of the toner core thereon, where the region lies between an

outer circumference of the arbitrary cross section and an inner circumference having a radius one half of a radius of the outer circumference, and

wherein the wax in a shape of dispersed particles occurring in the region occupies 80% by number or more of the total wax.

4. A dry toner according to Claim 1,

wherein the vicinity of the surface of the toner core is a region on an arbitrary cross section of the toner core, having a center of the toner core thereon, where the region lies between an outer circumference of the arbitrary cross section and an inner circumference having a radius two thirds of a radius of the outer circumference, and

wherein the wax in a shape of dispersed particles occurring in the region occupies 70% by number or more of the total wax.

5. A dry toner according to Claim 1, wherein the wax is not exposed from the surface of the base toner-particle.

6. A dry toner according to Claim 1, wherein the wax in a shape of dispersed particles having a particle diameter of 0.1  $\mu\text{m}$  to 3  $\mu\text{m}$  occupies 70% by number or

more of the total wax.

7. A dry toner according to Claim 1, wherein the wax is at least one selected from the group consisting of free fatty acid eliminated carnauba wax, rice wax, montan wax, and ester wax.

8. A dry toner according to Claim 1, wherein the toner binder comprises at least one modified polyester (i).

9. A dry toner according to Claim 8, wherein the toner binder has a toner composition containing the modified polyester (i) as a raw material thereof and the toner composition containing a modified polyester (i) is at least one of dissolved and dispersed in an organic solvent and is then dispersed into an aqueous medium so as to form the toner binder.

10. A dry toner according to Claim 8, wherein the modified polyester (i) is formed while a toner composition containing a polyester prepolymer is dissolved or dispersed in an organic solvent and is then dispersed into an aqueous medium.

11. A dry toner according to Claim 8, wherein the

toner binder further comprises an unmodified polyester (ii) in addition to the modified polyester (i), and wherein the weight ratio of the modified polyester (i) to the unmodified polyester (ii) is from 5:95 to 80:20.

12. A dry toner according to Claim 8, wherein the toner binder has a peak molecular weight of 1,000 to 10,000.

13. A dry toner according to Claim 8, wherein the toner binder has a glass transition point  $T_g$  of 40°C to 70°C.

14. A dry toner according to Claim 1, wherein the toner has a volume-average particle diameter  $D_v$  of 3.0  $\mu\text{m}$  to 8.0  $\mu\text{m}$  and a ratio  $D_v/D_n$  of the volume-average particle diameter  $D_v$  to a number-average particle diameter  $D_n$  of 1.00 to 1.20.

15. A dry toner according to Claim 1, wherein the toner has an average circularity of 0.93 to 1.00.

16. A dry toner according to Claim 1, wherein the toner particle has an spindle shape.

17. A dry toner according to Claim 16, wherein the toner particle has an spindle shape having a major axis  $r_1$ , a minor axis  $r_2$  and a thickness  $r_3$ , wherein the ratio  $(r_2/r_1)$  of the minor axis  $r_2$  to the major axis  $r_1$  is 0.5 to 0.8, and the ratio  $(r_3/r_2)$  of the thickness  $r_3$  to the minor axis  $r_2$  is 0.7 to 1.0.

18. A dry toner according to Claim 1, wherein the external additive comprises at least one of hydrophobic silica and hydrophobic titanium oxide.

19. An image forming process, comprising the steps of:

charging a photoconductor;

irradiating the photoconductor with radiation to form a latent electrostatic image thereon;

developing the latent electrostatic image using a toner to form a toner image;

transferring the toner image onto a recording medium; and

fixing the transferred unfixed toner image on the recording medium;

the fixing step being a heat fixing step comprising passing the recording medium bearing the unfixed toner image between a film and a pressurizing member of a

fixing device,

the fixing device comprising:

a heating member having a heating element,  
the film in contact with the heating member,

and

the pressurizing member in contact with the  
heating member with the interposition of the film,

wherein the toner is a dry toner comprising a base  
toner-particle, fine particles of a charge control agent on  
the surface of the base toner-particle, and an external  
additive thereover,

the base toner-particle comprising a toner core  
and organic fine particles on the surface of the toner core,

the toner core comprising at least a toner  
binder, a colorant, and a wax,

wherein the wax is existed more in the vicinity  
of the surface of the toner core than in any other rejoin of  
the toner core.

20. An image forming process according to Claim  
19, wherein the photoconductor is an amorphous silicon  
photoconductor.

21. An image forming process according to Claim  
19, further comprising applying an alternating field in the

step of developing the toner image.

22. An image forming process according to Claim 19, wherein the step of charging the photoconductor comprises bringing the photoconductor in contact with an electrostatic charger, and applying a voltage to the electrostatic charger.

23. A process cartridge, comprising:  
a photoconductor; and  
developing device,  
wherein the process cartridge is detachable from an image forming apparatus,  
wherein the developing device contains a dry toner,  
the dry toner comprising a base toner-particle, fine particles of a charge control agent on the surface of the base toner-particle and an external additive thereover,  
the base toner-particle comprising a toner core and organic fine particles on the surface of the toner core,  
the toner core comprising at least a toner binder, organic fine particles, a colorant, and a wax,  
wherein the wax is existed more in the vicinity of the surface of the toner core than in any other regions of the toner core.

24. An image forming apparatus comprising:  
a photoconductor;  
charger for charging the photoconductor;  
irradiator for irradiating the photoconductor with  
radiation to form a latent electrostatic image thereon;  
developing unit for developing the latent  
electrostatic image with a toner to form a toner image;  
transferring unit for transferring the toner image  
onto a recording medium; and  
fixer for fixing the transferred toner image on the  
recording member,

wherein the toner is a dry toner comprising a base  
toner-particle, fine particles of a charge control agent and  
an external additive on the surface of the base  
toner-particle,

the base toner-particle comprising a toner core  
and organic fine particles on the surface of the toner core,

the toner core comprising at least a toner  
binder, a colorant, and a wax,

wherein the wax is concentrated in the vicinity  
of the surface of the toner core.

25. An image forming apparatus according to  
Claim 24,

wherein the fixer is a fixing device comprising:



a heating member having a heating element,  
a film in contact with the heating member, and  
a pressurizing member in contact with the  
heating member with the interposition of the film, and  
wherein the fixing device is so configured as to  
allow a recording medium bearing an unfixed image to  
pass between the film and the pressurizing member.